

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A ball valve, comprising:
a valve body defining an inner seat and having a fluid inlet and fluid outlet; and
a control ball element rotatably mounted in the inner seat, and having
a partially spherical outer surface,
a flow passage through said ball element having disposed on an upstream end of said
flow passage,
a leading edge,
a first inner control surface abutting the leading edge, and
a second inner control surface abutting the leading edge at an angle oblique to the first
inner control surface;

wherein the first inner control surface comprises a cylindrical surface having a first
longitudinal axis and the second inner control surface comprises a cylindrical surface having a
second longitudinal axis and the first longitudinal axis is at an angle between about six degrees
and about twelve degrees to the second longitudinal axis.

2. (Canceled)

3. (Canceled)

4. (Currently amended) The ball valve of claim 1 ~~3~~, wherein the angle between the first
longitudinal axis and the second longitudinal axis is about nine degrees.

5. (Canceled)

6. (Original) The ball valve of claim 1, wherein the leading edge comprises a v-formation, and symmetric segments on each side of the v-formation.

7. (Original) The ball valve of claim 1, further comprising a control shaft attached to the control ball element, and an actuator configured to rotate the control shaft in response to a control signal.

8. (Original) The ball valve of claim 1, wherein the control ball element comprises a trailing edge abutting the first inner control surface, but not the second inner control surface.

9. (Original) The ball valve of claim 1, further comprising a pair of descending ears on the control ball element, wherein each ear defines a cylindrical passage.

10. (Original) The ball valve of claim 9, further comprising a pair of cylindrical extensions, wherein each extension is attached to a respective ear of the control ball element.

11. (Currently amended) A control ball element, comprising:
a ball segment having a partially spherical outer surface;
a leading edge on the ball segment; and
a flow passage through said ball element having
a first inner control surface on the ball segment and adjacent the leading edge, and
a second inner control surface on the ball segment and abutting the leading edge
at an angle to the first inner control surface;

wherein the first inner control surface comprises a cylindrical surface having a first longitudinal axis and the second inner control surface comprises a cylindrical surface having a

second longitudinal axis and the first longitudinal axis is at an oblique angle between about six degrees and about twelve degrees to the second longitudinal axis.

12. (Canceled)

13. (Canceled)

14. (Currently amended) The control ball element of claim 11 ~~13~~, wherein the angle between the first longitudinal axis and the second longitudinal axis is about nine degrees.

15. (Canceled)

16. (Original) The control ball element of claim 11, wherein the leading edge comprises a v-formation and symmetric segments on each side of the v-formation.

17. (Original)The control ball element of claim 11, wherein the ball segment comprises a trailing edge abutting the first inner control surface, but not the second inner control surface.

18. (Original)The control ball element of claim 11, further comprising a pair of ears descending from opposing sides of the ball segment.

19. (Canceled)

20. (Canceled)

21. (Canceled)